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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/561,819

11/15/2006

Edward Fuergut

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11/28/2007

DICKE, BILLIG & CZAJA

FIFTH STREET TOWERS

100 SOUTH FIFTH STREET, SUITE 2250

MINNEAPOLIS, MN 55402

EXAMINER

LE, THAO X

ART UNIT

PAPER NUMBER

2814

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,819	Applicant(s) FUERGUT ET AL.	
	Examiner Thao X. Le	Art Unit 2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-33 is/are pending in the application.
- 4a) Of the above claim(s) 20-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-19, 32 and 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/22/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 14-19 in the reply filed on 10/26/07 is acknowledged.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 14-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 14 reciting "electrodes of the sensor region" in line 1 and "tracks connecting the contact areas to the electrode" in line 4 that neither drawing nor specification show or describe the claimed limitation, the sensor region (3) does not have any electrode; thus scope of the claimed invention is not enabling.

For the purpose of the examination, "electrode of the sensor region" is being interpreted as region (4) and "tracks connecting the contact areas to the electrode" is being interpreted as the wiring (16) connecting to region (4).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 14-15, 17-19, and 32-33 are rejected under 35 U.S.C. 102(e) as being anticipated by US 7061106 to Yang et al.

Regarding claims 14, 32, Yang discloses a sensor component in fig.

1 comprising: a sensor chip (104), col. 4 line 18, with a sensor region (where 111 is located), electrodes (115) of the sensor region, conductor tracks (109), col. 4 line 37, and contact areas (115), col. 4 line 38, on an active top side of the sensor chip (104), the conductor tracks (109) connecting the contact areas (115) to the electrodes (115); a plastic plate (108), col. 4 line 36, in which the sensor chip (104) is embedded by its rear side and its edge sides, the active top side of the sensor chip together with a top side of the plastic plate having an overall top side, fig. 1; and a rewiring structure with a rewiring layer having rewiring lines (109) from the contact areas (115) to the external contact areas (107), col. 4 line 30 of the sensor component, fig. 1, the rewiring structure (109) being arranged on the overall top side.

Regarding claims 15, 33, Yang discloses the sensor component of claim 14, comprising: wherein the overall top side comprises electrode areas (116) of passive components (105), col. 4 line 23, embedded in the plastic plate (108), rewiring lines (109) extending from the electrode areas (116) to contact areas (115) and/or to external contact areas (107).

Regarding claim 17, Yang discloses the sensor component of claim 14, comprising wherein the sensor chip (104) and a semiconductor chip (105) with integrated circuit are embedded in a manner stacked one above the other in the plastic plate, the sensor region forming a part of the overall top side, fig. 3.

Regarding claims 18-19, Yang discloses the sensor component of claim 14, comprising wherein the sensor region is radiation-sensitive and comprises a lens (114), col. 4 line 60, wherein the plastic plate comprises through contacts, the through contacts (312), col. 6 line 3, being connected to external contact areas on a plastic plate rear side and being electrically connected to the rewiring lines on the overall top side, fig. 3.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 7061106 to Yang in view of US 5353498 to Fillion et al.

Regarding claim 16, Yang discloses the sensor component comprising IC (105) can be active die, passive die, and others, col. 4 line 23.

But Yang does not discloses the sensor component wherein the overall top side comprises contact areas of a semiconductor chip with integrated circuit, rewiring lines extending from the contact areas of the semiconductor chip to contact areas of the sensor chip and/or to electrode areas and/or to external contact areas.

However, Fillion discloses a semiconductor package in fig. 1e comprises a multiple chip (14 and 20) embedded in polymer (24), and an external contact 30.

2. At the time the invention was made; it would have been obvious to a person having ordinary skill in the art to including additional discrete components teaching of Fillion into the sensor package of Yang in order to create a multi-chip modules for desired application; and such package would have allowed a plurality of chips with different thicknesses on a planar surface without milling the chip as taught by Fillion in col. 2 lines 1-6.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao X. Le whose telephone number is (571) 272-1708. The examiner can normally be reached on M-F from 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael M. Fahmy can be reached on (571) 272 -1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

26 Nov. 2007

/Thao X Le/
Primary Examiner, Art Unit 2814